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Creighton University
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Vol. 4

MARCH.

No. 1

ANNOUNCEMENT
of the
COLLEGE OF PHARMACY

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Calendar.

1912

September 2—Monday, Fall Session begins.

November 28—Thursday, Thanksgiving Day. Holiday.

December 14—Saturday, Christmas Recess begins.

1913

January 2—Thursday, Winter Term begins.

February 7—Friday, Founders' Day. Holiday.

February 22—Saturday, Washington's Birthday. Holiday.

May 30—Friday, Decoration Day. Holiday.

July 4—Friday, Independence Day. Holiday.

August 9—Saturday, Junior Course ends.

Faculty

EUGENE A. MAGEVNEY, S. J.,
President of The Creighton University.

WILLIAM P. WHELAN, S. J.,
Lecturer on Moral Principles in Pharmaceutical Practice, and
Acting Dean.
The Creighton University.

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Creighton College of Law.

J. F. LANGDON, M. D.,
Lecturer on First Aids in Emergencies.
Assistant Surgeon to St. Joseph's and St. Catherine's Hospitals.
City National Bank Building.

JOSEPH ZASTERE,
Assistant in the Laboratory.

Creighton College of Pharmacy

The Creighton College of Pharmacy, formerly the Omaha College of Pharmacy, became a part of The Creighton University, September 1, 1905. The school has enjoyed a rapid growth from the first and now ranks with the leading colleges of pharmacy in the country.

The building occupied by the College of Pharmacy adjoins the Creighton Medical College on the West, and is located at 14th and Davenport Sts. It is one of the finest and most completely equipped buildings of its kind. It will provide ample accommodations for the growing school for many years to come. On the first floor is a lobby which is equipped with steel lockers for the use of the gentlemen students. The ladies' rest room is also on this floor. It is furnished with every convenience for the comfort of the lady students. The museum and library occupies the large room at the back on the first floor. The library contains a choice selection of standard books upon pharmaceutical and chemical subjects. It also contains a complete set of the reports of the American Pharmaceutical Association from the time of its organization in 1852. This is a complete library of pharmaceutical literature in itself. All the leading pharmaceutical and chemical journals are kept on file.

The museum contains collections of all the materials used in pharmacy in the various forms in which they are found upon the market, from the crude condition to the prepared product as used in medicine. One of the finest collections in this room is one of every drug, chemical, and pharmaceutical preparation contained in the U. S. Pharmacopoeia. It is literally the U. S. Pharmacopoeia illustrated. This collection is open to the use of the students for study and much valuable information is gained from it.

On the second floor is a faculty room, two large lecture rooms, the model prescription room, and a private laboratory for the use of the faculty only.

The third floor contains the general stock room and the pharmaceutical and chemical laboratories. These laboratories are fitted with every convenience for practical work and provide space for one hundred and forty students to work at one time.

The Demand for Educated Pharmacists.

A pharmacist is one who is skilled in the art of identifying, preparing, preserving, testing, and dispensing medicinal substances. A physician is one who is versed in the treatment of diseases by the use of medicine. The physician prescribes the remedy to be used, but the pharmacist prepares and dispenses the same. To properly prepare all medicinal substances in such a manner that their use as remedial agents shall produce the desired result requires a high degree of skill. Skill involves two things: First, knowledge, and, second, manual dexterity in execution. The most important factor in acquiring skill in the practice of pharmacy is the acquisition of technical knowledge. Knowledge comes by study and by observation, while ability to do comes through practice.

There are only two ways by which one can acquire the necessary amount of skill for the successful practice of pharmacy. One is by taking a systematic course in a college of pharmacy, and the other is by serving a long apprenticeship in a store and devoting much time to private study. The great majority of those who attempt to qualify themselves by the latter method find it a very discouraging process. A young man or woman upon beginning work in a drug store without any knowledge whatever of the materials with which he or she is expected to work, makes progress very slowly indeed. They must necessarily be assigned to a kind of work that any ordinary clerk in a general merchandise store can do, while they are forced to acquire a knowledge of pharmacy by very slow degrees, and in a very discouraging way. They spend a number of years before they are able to acquire the knowledge necessary to enable them to become registered pharmacists. On the other hand, those who take a course in a good college of pharmacy before taking up the work in a store, are in possession of such professional or technical knowledge as will enable them to do anything required to be done in first class pharmacy. They know the names and are familiar

with the drugs and chemicals, their properties, and their method of preparation, uses, and tests. They soon become as proficient in their work as those who have devoted years to the profession.

The pharmacist occupies so important a position between the physician and the patient that the public has a right to demand that he shall be skilled in his art. His services are of as great importance as are the services of a physician, and the responsibility resting upon him is as great as is the responsibility resting upon the physician. The physician must show evidence of special training for the practice of medicine before the state will permit him to engage in such practice. Likewise the state requires everyone who desires to practice pharmacy to show special fitness for such work by passing a more or less rigid examination, or by giving evidence of having completed a course of training in some good college of pharmacy. Some states require the candidate for examination to be a graduate of some recognized college of pharmacy. In due course of time the requirements for those who desire to practice pharmacy will be as exacting as they are for those who desire to practice medicine. Rapid strides are being made in respect to elevating the practice of pharmacy to the rank of a profession and in removing it from the position of pure commercialism. Important legislation has recently been enacted by the general government, and by many state governments fixing the standard of purity of drugs and of foods. This legislation has created a large demand for those specially qualified as inspectors. Such legislation is certain to be followed by that requiring a much more thorough preparation for those who desire to engage in this line of public service, as well as for those desiring to engage in the business of a retail pharmacist.

Course of Study.

The course of study requires two terms for completion and leads to the degree of Graduate in Pharmacy. The first or Junior Course is eight months. The Senior Course is six months. Two Junior Courses are given each year, one beginning about September first and closing in May, and the other beginning about January first and closing in August. One Senior Course is given each year, beginning about September first and closing in March. By this

arrangement those who take up the Junior Course in September have vacation during May, June, July and August. Those who begin the Junior Course in January work through the Summer, finishing the Junior Course in August, and then take up the Senior Course in September. By arranging the courses in this manner those who do not wish to attend school during the summer months can begin the Junior Course in September. Those who wish to complete the course in the shortest possible time may begin the Junior Course in January and complete both courses in fourteen months of continuous work. About eighteen hundred hours of actual class room and laboratory work are required in the course. The training acquired qualifies the graduate to pursue successfully any branch of pharmaceutical work or ordinary chemical analysis. The course embraces practically all the work that is ordinarily given for the degree of "Pharmaceutical Chemist." See the detailed description for summary of work covered in each subject.

The course is arranged in a progressive manner. The subjects taken up at the beginning of the term lay the foundation for the subjects that follow. Although lectures are given daily, the students are required to study the lessons before they are taken up in class. Then by question and explanation the instructor fixes the principles upon the student's mind in such a way that the knowledge he obtains is of practical benefit to him. All laboratory work is done under the immediate supervision of the instructor.

The course of study is so arranged that no time whatever is wasted. The student makes valuable use of every moment of his time from the beginning until the course is completed. All unimportant subjects are omitted and only those are included in the course which are essential for a thorough and practical training in pharmacy. All through the course the practical application of the knowledge obtained is kept before the student's mind.

Subjects Taught in the Course.

JUNIOR YEAR—Eight Months.

Inorganic Chemistry, five hours per week for thirty-two weeks.

Experimental Chemistry, ten hours per week for sixteen weeks.

Qualitative Analysis, ten hours per week for sixteen weeks.

Physics, three hours per week for ten weeks.

Pharmaceutical Latin, five hours per week for fifteen weeks.

General Pharmacy, five hours per week for thirty-two weeks.

Botany, five hours per week for ten weeks.

Microscopy, four hours per week for twelve weeks.

Pharmacology, three hours per week for ten weeks.

Materia Medica, five hours per week for sixteen weeks.

Pharmaceutical Arithmetic, five hours per week for sixteen weeks.

Physiology, five hours per week for sixteen weeks.

Total, 953 hours in class room and laboratory.

SENIOR YEAR—Six Months.

Manufacturing Pharmaceutical Chemistry, ten hours per week for sixteen weeks.

Dispensing, ten hours per week for eight weeks.

Pharmacy, five hours per week for twenty-four weeks.

Materia Medica and Therapeutics, five hours per week for twenty-four weeks.

Toxicology and Posology, two hours per week for twenty-four weeks.

Organic Chemistry, three hours per week for twenty-four weeks.

Quantitative Analysis, ten hours per week for twelve weeks.

Pharmaceutical Testing, ten hours per week for six weeks.

Drug Assaying, ten hours per week for six weeks.

Commercial Training, two hours per week for twenty-four weeks.

Special Dispensing in the Free Dispensary of the College of Medicine, twelve hours per week from six to eight weeks for each student.

Total, 784 hours in class room and laboratory.

Inorganic Chemistry.

The science of chemistry lies at the foundation of a course in Pharmacy. Without a scientific knowledge of chemistry one cannot intelligently overcome the numerous difficulties that arise in compounding and dispensing. The subject is taken up in the most

elementary manner. Consideration is first given to the general properties of matter and the laws governing the form and state of existence of the same. The relationship of atoms, and molecules; atomic and molecular forces; physical and chemical changes; elementary and compound substances, are carefully studied. The subject is taught by lecture, recitation and by experimentation. Numerous experiments are performed by the instructor illustrating the principles studied in the class room. Each student performs a great variety of experiments in order to become thoroughly familiar with the characteristic properties of the substances studied. The non-metals and their characteristic compounds are studied first. Due attention is given to the nomenclature of acids and the salts derived from them. The metallic elements are studied in the order of their arrangement in the Periodic System. Numerous examples illustrating every kind of chemical problem are given. Much practice is given in writing chemical equations. The course continues thirty-two weeks, five hours per week.

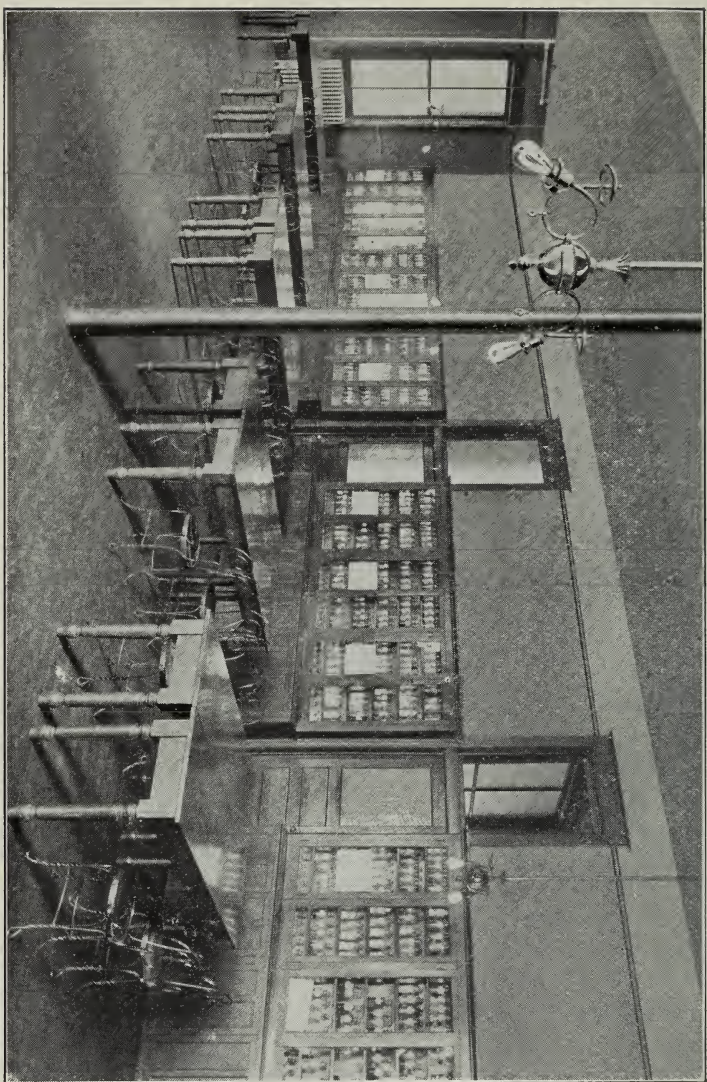
Organic Chemistry.

The course in Organic Chemistry continues through the entire Senior year. It includes a study of the source of organic compounds, their properties, purification, proximate and ultimate analysis, determination of melting and boiling point, homology, isomerism, destructive distillation, combustion, decay, fermentation, determination of formula from result of analysis; structural, graphic and molecular formula, etc.

The organic substances are classified and studied under the following heads: Hydrocarbons, halogen derivatives of hydrocarbons, alcohols, aldehydes, acids, ethers—simple and compound—ketones, fats, soaps, carbohydrates, glucosides, cyanogen compounds, mercaptans, benzene and benzene derivatives as mono, di, and tri-hydroxy compounds, the aldehydes, acids, terpenes and their derivatives, diazo compounds, pyridin bases, animal and vegetable alkaloids, complex synthetic compounds as phenacentin, antipyrine and acetanilid, amines, amides and all other organic substances of pharmaceutical interest. Lectures on the commercial industries of sugar-making, brewing, soap-making, gas-making and fermentation indus-



Creighton College of Pharmacy.



Creighton College of Pharmacy — Library and Museum.

tries are given at appropriate times during the course.

Experimental Chemistry.

This course gives the proper use of apparatus, methods of manipulation, and prepares the way for Analytical Chemistry.

The work in Inorganic Chemistry in the class room is supplemented by practical work in the laboratory. Each student is supplied with a full set of apparatus and all chemicals necessary for performing all experiments which will aid him in understanding the principles taught. Sufficient direction is given the student to enable him to successfully perform any experiment. He is then required to perform the experiment, make his observations and draw his conclusions. It is in this work that independence of thought is developed. Full notes are made upon all experiments performed and the same are carefully inspected.

Qualitative Analytical Chemistry.

The course teaches the proper use of apparatus, methods of manipulation, and prepares the way for the more important work of Analytical Chemistry and Pharmaceutical Manufacturing.

This course follows the course in Experimental Chemistry. It is begun with a general description of the operations, apparatus used and with the proper classification of the elements and compounds for the purpose of qualitative analysis. The action of the group reagents upon solutions of all the common base-forming elements is determined by experiment. The bases are then classified into groups. The methods of separation of the bases of each group is studied in connection with solutions of known composition. Full record is required to be made of each step as to the substance used, the reagent, the result, the inference and the compounds formed. All reactions are required to be represented by equations. Work with solid and liquid substances of known composition is continued until such time as the student becomes thoroughly familiar with the principles involved. Acid radicals are studied in the same systematic manner as are the bases. Substances of unknown composition are then analyzed and their composition determined. The student is required to make a stated number of correct analyses before

he is given credit for the course.

The course in Inorganic Qualitative Analysis is followed by a course in Organic Qualitative Analysis. The course not only fits the student for practical analytical work, but rules and principles are developed which greatly aid in Manufacturing Chemistry and in Dispensing. It also prepares for the systematic testing of the purity of commercial chemicals and pharmaceutical products.

Quantitative Chemical Analysis.

This course extends through ten weeks, ten hours per week. It includes work in gravimetric analysis, illustrating all principles of that branch of quantitative analysis; and in volumetric analysis illustrating the care, use, and calibration of apparatus, principles of standard solutions, and in making and standardizing volumetric solutions of all kinds. Much practice is given in acidimetry, alkalimetry, oxidation and reduction, analysis by precipitation, and in gasometric analysis. The course is followed by a course in Drug Assaying.

Physics.

This subject is taken up at the beginning of the Junior Year because of the important relation it bears to Chemistry and to Pharmacy. A knowledge of the elementary principles of Physics is essential to a clear understanding of these subjects. The principal topics treated are matter, force, molecular theory of structure, states of matter, properties, weight, cohesion, adhesion, capillarity, diffusion, osmose, dialysis. Mechanics of fluids as under: fluidity, viscosity, pressure within liquids, transmission of pressure, conditions of equilibrium, the barometer, pumps and condensers, Boyles Law, the syphon, buoyancy, density and specific gravity. Under heat we study source, temperature, the thermometer and relationship of various thermometers, conduction, convection and radiation, changes in state as produced by heat as liquefaction, vaporization, distillation, sublimation, specific heat, etc. The important principles of light and electricity are also considered.

Latin.

No one can thoroughly understand the official nomenclature of

the materials of medicine and pharmacy without some knowledge of Latin. It is also essential in correct prescription writing. No attempt is made to give a complete course in Latin, but the aim is to present the elements of the language in such a way as to enable the student to understand the structure of the Latin words, phrases, and abbreviations that are used in medicine and pharmacy.

The course is given immediately following the course in Physics and gives the proper foundation for the use of the language in the study of *Materia Medica* and Pharmacy. The course continues fifteen weeks. The text used is prepared especially for pharmacy and medical students, and contains no subject matter that is unprofitable for students of these subjects.

Pharmacy, Junior Course.

Pharmacy is taken up at the beginning of the Junior Course. The course is begun with a description of *Pharmacopoeias*, their origin, development, methods of revision, methods of arrangement, and with a history of the U. S. *Pharmacopoeia*. The National Formulary, Dispensatories, and other literature of Pharmacy are discussed. The sixteen weeks of the Junior Course, which is devoted to the study of pharmacy, is spent entirely upon General Pharmacy. The principles and construction of balances, their use, care, and methods of testing; heat and its source, methods of generation, regulation, measuring and its use in fusion, sublimation, calcination, distillation, evaporation, incineration, and torrefaction; mechanical division of drugs as under grinding, trituration, levigation, elutriation, precipitation, use of mortars, etc.; principles of the separation of volatile and nonvolatile substances, glycerites, etc., are carefully studied. The definitions of the National Syllabus committee are given the students and they are required to use them in their recitations. The balance of the Junior term is given to the study of the official salts.

Pharmacy, Senior Course.

The Senior Course in Pharmacy is a continuation of the work of the Junior Course and continues through twenty-four weeks, three hours per week in the class room, supplemented by the work in the

pharmaceutical laboratory, ten hours per week for twenty-four weeks. The course is comprehensive and thorough as every class of official preparation is carefully studied, both in the class room and in the laboratory. It includes a study of waters, liquors, decoctions, infusions, syrups, mucilages, honeys, glycerites, elixirs, spirits, tinctures, wines, vinegars, fluid extracts, extracts, resins, oleoresins, colloids, emulsions, mixtures, pills, lozenges, confections, effervescent salts, cereates, ointments, powders, triturates, liniments, oleates, plasters and suppositories.

The course also includes a careful study of the elements, hydrogen, oxygen, chloride, bromide, iodine, sulphur, phosphorus, carbon, boron and their compounds; also the compounds of sodium, potassium, lithium, ammonium, calcium, strontium, magnesium, aluminum, cerium, iron, manganese, chromium, mercury, antimony, arsenic, bismuth, copper, lead, zinc, gold, silver, and also the organic substances: cellulose, starches, gums, sugar, the coal tar products and derivatives of the same, alcohols, fats, fixed oils, essential oils, organic acids, glucoses, alkaloids, neutral principles and the animal products. A few weeks are devoted to the study of the National Formulary and non-official preparations. The course closes with a thorough study of the prescription, the various kinds of incompatibility, solubility of ingredients, pricing, and abundant practice in the reading of difficult prescriptions taken from the actual prescription files of the city stores.

Manufacturing Pharmaceutical Chemistry.

This course is supplementary to the class work in pharmacy and embraces about three hundred and twenty hours of laboratory work. It follows closely the order of instruction in pharmacy. Each student is supplied with a full set of apparatus for carrying out all the important processes in pharmacy. The college furnishes all chemicals free of cost to the student. The work is carefully supervised by the instructor who spends the whole period of laboratory work with the class, giving all necessary directions as to the best methods of manipulation, etc. It includes practice in the use of every form of pharmaceutical apparatus such as thermometers, hydrometers, pycnometers, balances, burners, drying ovens, steam

baths, water baths, distilling apparatus, etc., etc. The students are required to save a sample of each preparation, which becomes his property upon the completion of the course. Each sample is carefully inspected by the instructor, and if found to be unsatisfactory the student is required to repeat the process until a product is obtained which will meet every requirement. Every important pharmaceutical product as enumerated in the remarks upon the Course in Pharmacy is prepared in the laboratory. The most difficult ones of each class are chosen for preparation. The preparations which come more particularly under the head of extemporaneous pharmacy are studied in the course in Dispensing, which is a continuation of the laboratory course in Manufacturing Pharmaceutical Chemistry.

Dispensing.

This course follows the course in Manufacturing Pharmaceutical Chemistry and continues eight weeks, ten hours per week. It is placed last in the course in order to give the student the benefit of all the knowledge acquired in the previous courses, in developing the most important and practical part of the pharmacist's art, the art of dispensing.

A careful study is made of the prescription as to its purpose, its parts, and the proper course of procedure upon receiving a prescription. Extensive practice is given in reading and criticising prescriptions of every character. The student is also required to write a number of typical prescriptions. A great amount of practice is given in filling prescriptions involving difficulties of every kind. The order for receiving, filing, checking, pricing, and recording prescriptions in the Dispensing Laboratory is the same as is in use in the best prescription pharmacies. Full instruction is given as to the proper selection, care, and use of all materials used in dispensing. Methods of weighing, measuring, pasting and labeling, wrapping, cleaning of utensils, arrangement of prescription case, etc., are all thoroughly taught by theory and by an abundance of practice.

Systematic instruction and an abundance of practice is given in making and dispensing the various kinds of mixtures, pills, emul-

sions, powders, suppositories, ointments, cereates, plasters, confections, lozenges, troches, cachets, konseals, hard and soft capsules, bougies, etc.

Most careful attention is given to incompatibility of every kind—therapeutical, pharmaceutical, and chemical—and the methods of overcoming the same. This course of instruction is supplemented by practice in our model prescription department in which bona fide prescriptions for the patients of the free dispensary of the Medical College are filled.

Practical Prescription Work.

All the prescriptions written for patients at the free dispensary of Creighton Medical College are filled by students of the College of Pharmacy under the supervision of one of the instructors. A model prescription department is fitted up especially for this work. The Senior class is divided into small sections and each section does this practical work for a given period. Perhaps as great a variety of prescriptions is filled in this department each day as is filled in any one of the city stores, since a large number of the leading physicians of the city do work in the free dispensary. Students are required to make nearly all materials used in this department. It affords a large amount of practical experience which is of great value in business.

Pharmaceutical Arithmetic.

The course in Pharmaceutical Arithmetic extends through thirty-two weeks, three hours per week, and is given in the Junior Course. The course is arranged to meet the needs of those whose mathematical training has been somewhat limited, and to give to all the necessary practice in solving problems which come up in the practice of pharmacy and in chemical analysis. The work is arranged in logical order and includes problems of weights and measures, specific gravity, specific volume, conversion and reduction of formulas, percentage problems of every kind, dilution and fortification, alligation, problems involving chemical formulae and reactions, and numerous miscellaneous problems. On the whole it is one of the most helpful courses given.

Botany.

A knowledge of this branch is indispensable to a pharmacy student. The student develops the language needed in studying Pharmacognosy, Materia Medica, and Powdered Drugs. Instruction in this subject is given largely by recitations. A good text book is used as an outline. The student is required to use plant specimens in preparing his lessons, and when convenient, make botanical excursions into the country. Most time and attention are given to those parts that concern Pharmacognosy and Materia Medica. The morphology, ecology, histology, and plant physiology; the classification of roots, stems, and leaves; and the general classification of plants are all thoroughly canvassed.

Microscopy.

Each student is supplied with a compound microscope and other needed accessories. The student is taught how to manipulate the instrument; and also how to kill, harden, soften, section, clear, stain, dehydrate, and mount specimens. As many as possible of the crude drugs are used in illustrating the microscopic structure of plant tissue. The cells, tissues, systems, and organs of the higher plants; some lower plants; many plant products such as starches, chlorophyll bodies, crystals, resins, gums, and gumresins are mounted, studied and drawn. The aim of the course is to teach the student how to detect adulterants in powdered drugs. It follows the courses in Pharmacognosy and Materia Medica. The microscopic structure of many pure samples of starches, powdered spices, leaves, stems, roots, barks, roots and rhizomes, resins, etc., are studied as standards. Other physical properties such as color, taste, odor, etc., are associated with the microscopic appearance. This qualifies the student to pursue the study of adulterated drugs.

Pharmacognosy.

This branch embraces the study of crude drugs and is taken up subsequent to Microscopy. Each student is equipped with a set of crude drugs that he takes to his room. Important drugs get most consideration. The school possesses several complete sets of drug samples. One set contains every specimen in the U. S. Phar-

macopoeia. The students have access to this set at all times. Several wholesale drug houses have donated to the school samples of crude drugs. The drugs are studied in botanical order, one hour a day for two months.

Materia Medica and Therapeutics.

Instruction in these branches is given by lecture and recitation. The U. S. Pharmacopoeia vegetable drugs are first taught, then the animal, the inorganic, and finally some important unofficial drugs. The vegetable and animal drugs are studied in botanical and zoological order. As the student's knowledge of Materia Medica becomes more comprehensive, attention is given to the arrangement of drugs according to their therapeutic effect. The official definition, natural order, botanic source, synonyms, habitat, part used, active principles, action and uses, official preparations and dose of each vegetable drug are learned. Similar outlines for the animal and inorganic drugs are followed. The U. S. Pharmacopoeial dose is taught for important and potent drugs.

Toxicology.

This is a subject of great importance to the physician, the pharmacist, and the public. The public has a right to demand of the pharmacist such a knowledge of poisons as to enable him to guard against any possible errors in prescriptions. All candidates for license to practice are required to pass an examination in toxicology. The pharmacist is expected to be competent to afford prompt and intelligent treatment in cases of accidental poisoning. The poisons are classified into true, corrosive, and cumulative. The symptoms, antidote, and treatment are carefully studied. The methods of detection and test are given in connection with the course in Physiological Chemistry and Drug Analysis.

Drug Assaying.

This course is a continuation of the course in Quantitative Analysis. The work includes analysis of the following drugs by the methods of the U. S. Pharmacopoeia and modifications of these methods: belladonna, leaves or root, and some preparations of belladonna; cinchona for anhydrous and other soluble alkaloids, and fluid extract of cinchona; cocoa; colchisum corm and seed; conium,

hydrastis, ipecac, nux vomica and some preparations; opium and some of its preparations. The course is thoroughly practical and teaches the student to be able to confirm the strength of all potent drugs.

Pharmaceutical Testing.

Qualitative and quantitative tests are made for purity and identity of inorganic acids and compounds, the organic acids and salts of organic acids, alcohol, ether, chloroform, phenol, the estimation of the iodine value and saponification value of fixed oils, assay of essential oils, pepsin and pancreatin, scale salts, tests for purity and identity of alkaloids, acetanilid, prenacetin, sulfonal, antipyrin, and many other organic compounds.

This course fits the student for the analysis of any pharmaceutical product and lays the foundation for the practical commercial chemical analysis.

Physiology.

Every intelligent pharmacist should be acquainted with the structure and functions of the organs of the body. He may then better understand the action of drugs on the system. The relation between the action of drugs and Physiology is made clear to the beginner by teaching in connection with the Physiology the action of such drugs as emetics, astringents, cathartics, carminatives, etc., as illustrations. Instruction is given by recitation and lecture. Only those parts of the subject considered of practical importance to the student are extensively taught. The subject is illustrated by specimens, manikins, and skeletons. Special lectures are given on hygiene by eminent doctors of the medical faculty. Instruction is given three hours per week for sixteen weeks.

Physiological Chemistry and Urinalysis.

This course continues six weeks, ten hours per week, in the laboratory. It is supplementary to the course in Physiology in the class room. In it is taken up in the chemistry of the carbohydrates, such as dextrose, inositol, cane sugar, milk sugar, maltose, starch, glycogen, and cellulose; of fats as to composition, decomposition, saponification, and emulsification; of proteids as to classification, and the physical and chemical properties. Attention is given to the

chemistry of foods, as milk, meat, eggs, flour, and the changes they undergo when cooked, and of the action of the saliva, the gastric, pancreatic and intestinal juices and their respective ferments; and of the bile and the blood.

In Uranalysis attention is given to the normal constituents, their tests and variation in disease, and to the abnormal constituents, their signification and tests. The microscope is also used in the detection of the abnormal constituents. Both qualitative and quantitative tests are given whenever both would be of value in a diagnosis of the condition. This course fits the student for practical uranalysis.

First Aid in Emergencies.

In connection with the course in Physiology is given a course in "First Aid to the Injured." It is a natural thing for all to rush to the nearby drug store for assistance in case of an accident of any kind. Pharmacists should be familiar with the most simple and effectual means of handling all kinds of accidents until the physician can be procured. A course in "First Aid" is given in order to make the students familiar with the best methods of procedure. This course is given in the form of lectures and by practical illustration both in the college and in the hospital. What to do in case of "Bleeding," "Fractures," "Fainting," "Drowning," "Bites of Animals," "Poisoning," etc., receive careful study. This course is not intended to fit the pharmacist to take the place of the physician, but simply to teach him what should be done until the physician or surgeon can be obtained. The life of the injured very frequently depends upon what is done upon the immediate occurrence of the accident. This course meets a pressing demand and is pursued with the greater interest and profit.

Commercial Training.

A short course is given in which the students are taught the proper form and use of all kinds of commercial paper; as notes, drafts—foreign and domestic—checks, bills, statements, invoices, inventories, etc. They are taught the most improved and labor-saving methods of keeping the necessary records of their business. This is as important an element of the pharmacist's training as is the in-

struction in pharmacy proper.

Special Work.

Students who are able to give only a portion of their time to their studies may take such branches as they desire and devote the remainder of their time to other work. Those who adopt this method will require a longer time to complete the course, but many will be thus enabled to take the work who otherwise would not be able to do so. No special course preparatory to State Board Examinations is given. Students will not be enrolled for less than a full term; neither will they be permitted to take a state examination before the term for which they have enrolled has been finished.

Examination.

Regular monthly examinations are held in each branch in addition to the drills and class tests that are given from time to time in the regular course of the work. Record is kept of these monthly examinations and these records form a part of the final standing of the student. These regular examinations are a great help to the student in giving him opportunity to use the knowledge acquired and in teaching clearness of expression. A final examination must be taken in every branch before credit will be given for the completion of that particular study.

Entrance Requirements.

No one should undertake the study of pharmacy who has not, at least, a good common school education or such qualifications as would enable him to enter a good high school. A complete high school course is a great advantage. Since the law of the state fixes no standard of scholarship for candidates for registration, the college authorities use their own judgment in fixing entrance requirements. Some young men who have never had the advantage of high school course, but who are well grounded in the common branches, do as good work as do some graduates of high schools. No one who is able to do the work required will be deprived of any of the privileges of a course in pharmacy. A person who has not the qualifications necessary to enter a good high school cannot be admitted. A knowledge of Latin, Physics, Botany, or Chemistry is not required for entrance. Generally speaking, no entrance examinations are

demand, but in some cases it is necessary for the candidate to take such an examination in order to determine his ability to do the work of the course.

Time to Enter.

All students should be present at the beginning of the session in September or in January as only at these two times are classes started in beginning work. Students who enter in September will finish the Junior course the following May. They will have a vacation during the summer months and take up the Senior course in September, the second year. The Senior course is completed in six months, or about the first of March. Students who enter in January pursue the course continuously to completion, with a three weeks' vacation in August between the Junior course and the Senior course. Students who enter after the session has begun must take up all back work in order to receive full credit for the work of the course, otherwise they will receive credit for the actual time in attendance.

Requirements for Graduation.

Every person upon whom this college confers the degree of Graduate of Pharmacy must be of good moral character and have reached the age of eighteen. Evidence must be furnished that the candidate has attended a full course in some reputable College of Pharmacy, the last school year of which must have been in this college, and they must satisfactorily pass all final examinations. An attendance of ninety per cent is required.

Text Books.

The text books in regular use are as follows: Arny's Pharmacy, Burgen & Davis' Botany, Simon's Chemistry, Leffman and LaWall's Organic Chemistry, Culbreath's Materia Medica, Sturmer's Pharmaceutical Arithmetic, Sturmer's Pharmaceutical Latin, Brundage Toxicology, Huxley's Elements in Physiology, U. S. Pharmacopoeia, and the National Formulary.

Following are the most important reference books used in the work: The National Standard Dispensatory, the U. S. Dispensatory, Remington's Practice of Pharmacy, Coblentz's Pharmacy, and many other standard works on Pharmacy, Materia Medica, and Chemistry. All text books may be obtained at the College, though

no one is required to purchase them here. The College will also purchase such second-hand books as are used in the regular course of the work when students desire to dispose of the same.

Expenses and Deposits.

A Matriculation fee of \$5.00 is charged. This is payable but once and is never refunded. There is also a fee of \$5.00 per year covering general admission to the University Athletic events, Glee Club Concert, Debate, College Play and subscription to the Chronicle, the University's official monthly publication. The tuition for the Junior course is \$100.00; payable, \$50.00 at the time of entrance and \$50.00 at the beginning of the second half of the Junior course. The tuition for the Senior course is \$40.00, payable at the beginning of the course. Students who have taken their Junior course at other colleges are required to pay \$60.00 tuition for the Senior course. Special arrangements may be made when it is not convenient to pay the tuition as indicated above. No laboratory fees are charged aside from a deposit of \$5.00 to cover breakage. Any unused portion of this deposit is refunded at the time the student leaves the school. The graduation fee is \$10.00, payable at least three weeks before commencement. One-half of this sum is set apart for the Alumni Association. Each graduate thus becomes a life member of the Alumni Association and no further dues are required.

No tuition is refunded, but in case a student is compelled to leave school before completing the term for which he had enrolled, credit will be given for the unused portion.

If a student does not do his duty or if he conducts himself in a manner not approved by the authorities of the school, he will be suspended or expelled and no tuition will be refunded.

Employment.

The college will do all it can to secure employment for students who desire assistance. It will assist all who desire to defray a portion of their expenses while attending college in securing places to do relief work in stores, to act as waiters in restaurants, hotels, etc. All who desire such position will be accommodated. Many of our best students so defray part of their expenses while in college.

Valuable assistance will be given the graduates in securing permanent positions for them. We have many more calls for competent help than we can supply.

Board and Rooms.

Good rooms and board may be had, together or otherwise, near the college at reasonable rates. A list of reliable places is kept at the college office, and students are assisted in finding satisfactory places. Those who come from a distance should not engage room or board before they come to the college office unless they are acquainted in the city and understand fully the conditions.

Good rooms, including heat, light, etc., may be had for from \$1.00 per week to \$1.50 per week. Table board with private family will cost from \$3.00 to \$4.50 per week. Many students get board and room for \$17.00 per month.

A number of students do some light work by which they can earn their board. We are able to assist all who may desire such opportunities.

Special University Privileges.

Students of pharmacy may take advantage of several Literary, Debating and Oratorical Societies conducted under the supervision of members of the University Faculty and they may receive individual help, just as students of the Classical Department do. The exercises include declamation and elocutionary reading of extracts from the classic drama or from model orations; criticism, and discussion of interpretation and delivery by the instructors; set orations; extemporaneous speaking; the theory and practice of parliamentary law and debates. The amount of time devoted to regular debates, the supervision exercised in the choice of questions, the assistance rendered in the preparation of argument, make this exercise most profitable. Questions of interest of a political, historical, or economic nature, prepared by a special committee, afford an opportunity to all students to engage in general discussion.

General Information.

To reach the college from the Union or Burlington stations, take a Dodge street car and get off at 14th street. Walk two blocks north to the college at the corner of 14th and Davenport streets.

The college is situated three blocks south and one block east of the Webster street station. Bring baggage checks to the college office and you can secure your room before having your baggage removed from the depot.

Students arriving in the city at night should go to some good hotel and report to the college next day. School is in session five full days in the week. The time required at school is from six to seven hours per day, in recitation and laboratory work. Lessons must be prepared outside of these hours.

The State Board of Examiners usually holds its February examination at the college. This gives all the graduates who have had the necessary experience an opportunity of taking this examination without any inconvenience.

Students of the College of Pharmacy are welcome to take part in all athletic privileges offered by the University. They also have the privilege of using the large library of Creighton University and of joining the orchestra, band, glee club, and choir.

Frequent visits are made during the year to many large manufacturing plants in the city. A great amount of practical information is gained by these visits.

For further information concerning the College of Pharmacy, address, The Dean, 14th and Davenport streets, Omaha, Nebraska.

For information concerning the other Colleges of the University, address

The Dean, Creighton College of Law, 210 South 18th Street.

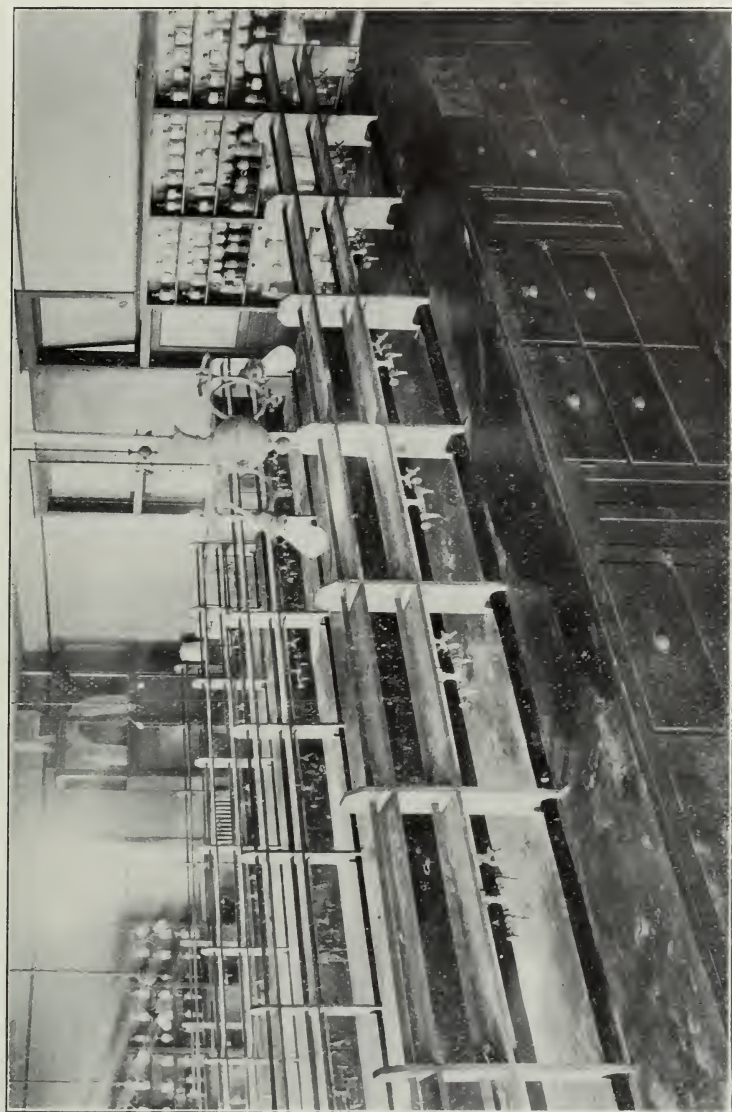
The Dean, Creighton College of Medicine, 14th and Davenport Streets.

The Dean, Creighton College of Dentistry, 210 South 18th Street.

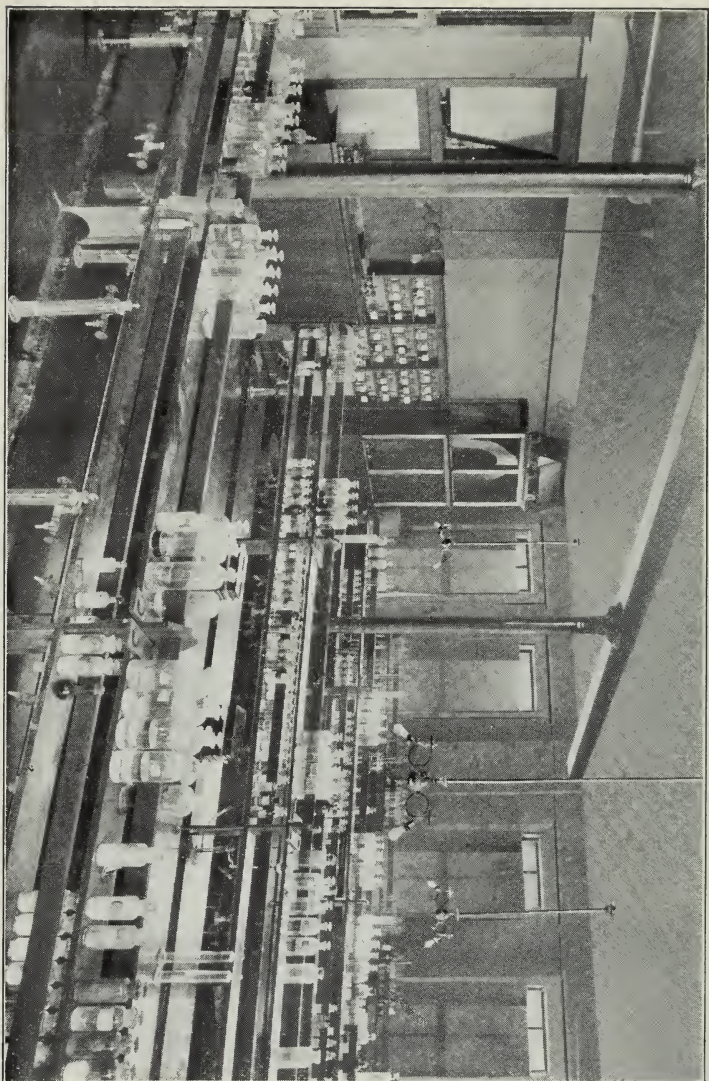
The Dean, Creighton College of Arts, 25th and California Streets.

DIRECTORY OF GRADUATES.

Alquist, Richard, 1908	Denver, Colorado
Allen, E. V., 1906, clerk	Indianola, Nebraska
Alvord, Clifford, 1912	Nebraska City, Nebraska
Anderson, George E., 1905, clerk	Bristow, Nebraska
Andrews, Clayton F., 1909, student at State Uni.	Lincoln Nebraska
Andrews, Mrs. D. M., 1902, proprietress	Norfolk, Nebraska
Armitage, B. A., 1905, clerk	Kearney, Nebraska
Armstrong, L. C., 1909, clerk	Bassett, Nebraska
Armstrong, W. S., 1907	Hemingford, Nebraska
Ashley, Ira, 1902	Address unknown
Atchison, M. L., 1906, proprietor	Kearney, Nebraska
Atterbery, H. E., 1912	Sundance, Nebraska
Ausburn, H. B., 1905, clerk	Colorado Springs, Colorado
Baird, J. S., 1906, clerk	Superior, Nebraska
Baker, H. W., 1906, proprietor	Lincoln, Nebraska
Baker, Walter, A., 1909, proprietor	Lincoln, Nebraska
Bailey, George, 1912, ...	Grand Valley, Colorado
Baish, Charles J., 1911, clerk	Aberdeen, Washington
Barber, D. F., 1907	Address unknown
Barnes, B. W., 1905, proprietor	40th and Dodge Sts., Omaha
Bartholomew, Vera, 1908, clerk	Gothenburg, Nebraska
Baum, C. S., 1905, clerk	29th and Leavenworth Sts., Omaha
Beal, Hugh, 1904, commission business	Alliance, Nebraska
Beck, John D., 1905, proprietor	Beatrice, Nebraska
Beebe, P. H., 1904, proprietor	University Place, Nebraska
Beckley, W. R., 1903, salesman	Cleveland Drug Co., Omaha
Bell, D. W., 1902, proprietor	Herman, Nebraska
Bellamy, R. C., 1903, proprietor	Arapahoe, Nebraska
Bennett, C. A., 1906, clerk	Loup City, Nebraska
Beranek, Stanley, 1911, student State Univ.	Lincoln, Nebraska
Berquist, Claus, 1906, clerk	Nephi, Utah
Beza, L. R., 1908, manager	Ashton, Nebraska
Blair, John V., 1909, clerk	Osage, Oklahoma
Bobisud, V. W., 1901, proprietor	Inman, Nebraska
Bohac, Frank, 1901, proprietor	Howells, Nebraska
Boler, Mary A., 1908, clerk	Omaha, Nebraska
Bower, Thomas, 1912	Bloomington, Nebraska
Boyd, C. E., 1906, clerk	Nelson, Nebraska
Bradshaw, H. W., 1906, proprietor	Superior, Nebraska
Brawner, B. C., 1907, clerk	33d and Cuming Sts., Omaha
Brink, E. C., 1904, proprietor	Ord, Nebraska
Brink, Fred, 1909, clerk	Grand Island, Nebraska
Brown, Oscar, 1912, ...	Omaha, Nebraska
Ballis, O. E., 1905, proprietor	Beatrice, Nebraska
Burkerd, Fred J., 1909, proprietor	Woodriver, Nebraska
Butler, Mrs. H. J., 1912	Omaha, Nebraska
Cahoon, Shirley, 1909, clerk	Twin Falls, Idaho
Caillet, Clyde, 1912	Wellington, Colorado
Cane, R. R., 1904, proprietor	Elgin, Nebraska
Cannon, T. N., 1908, clerk	Juanita, Nebraska
Carlson, Emus, 1908, proprietor	Dannebrog, Nebraska
Carson, R. M., 1906	Colorado Springs, Colorado
Carson, Mrs. Lucy, 1906	Colorado Springs, Colorado



Creighton College of Pharmacy — Chemical Laboratory.



Creighton College of Pharmacy — Pharmaceutical Laboratory.

Case, D. P., 1906, clerk	Newman Grove, Nebraska
Cathcart, E. E., 1903, real estate	Lemmon, South Dakota
Chism, S. H., 1907, proprietor	Stella, Nebraska
Chaffin, Lloyd, S., 1911, clerk	Loveland, Wyoming
Christensen, Holger, 1909, clerk	St. Paul, Nebraska
Cole, Richard, 1912	Peru, Nebraska
Coleman, Zora H., 1908, clerk	Overton, Nebraska
Conard, D. L., 1908, clerk	McCook, Nebraska
Connors, Thomas, 1912	Pueblo, Colorado
Conyers, L. R., 1909, clerk	Payson, Utah
Cook, Ella, 1902, clerk	Red Cloud, Nebraska
Cook, Mira, 1906, clerk	Red Cloud, Nebraska
Cooney, George, 1901, proprietor	Omaha, Nebraska
Copeland, Harry, 1908, proprietor	Arcadia, Nebraska
Cording, Joe, 1905, proprietor	Litchfield, Nebraska
Cornils, John, 1904	Address unknown
Coughlin, J. H., 1908, clerk	Carthage, South Dakota
Connor, W. P., 1911, clerk	Wood River, Nebraska
Crook, Roy, 1901, physician	Winneton, Nebraska
Curtis, A. C., 1902, clerk	Tekamah, Nebraska
DeMay, Griffen A., 1909, clerk	Danbury, Nebraska
Davidson, Comme, 1911	Merna, Nebraska
Deerson, Ella, 1912	Elkhorn, Nebraska
Dienstbier, Bert, 1905 student Creighton Dental College.....	Omaha
Docekal, Edward, 1906, proprietor	17th and Farnam Cts., Omaha
Doering, George, 1908, proprietor	Battle Creek, Nebraska
Dolezal, Louis, 1907	South Omaha, Nebraska
Douglas, M. J., 1907, proprietor	Elkhorn, Nebraska
Draeger, C. H., 1911, clerk	Omaha, Nebraska
Dudley, Vernon, 1909, proprietor	Guide Rock, Nebraska
Duffy, Arthur D., 1909, clerk	Hot Springs, South Dakota
Duffy, Edward L., 1909, clerk	Council Bluffs, Iowa
Dunkle, R. W., 1904, clerk	Council Bluffs, Iowa
Dunn, Francis, J., 1911, clerk	Wood River, Nebraska
Durham, Natella, 1912	Council Bluffs, Iowa
Easton, Archie E., 1908, clerk	Dakota, Nebraska
Endres, G. E., 1905, proprietor	Crab Orchard, Nebraska
Erway, R. M., 1903, proprietor	Valley, Nebraska
Ewing, S. E., 1905, clerk	Creston, Nebraska
Emery, Thomas W., 1911, proprietor	Greeley, Nebraska
Ferguson, Lloyd M., 1909, clerk	Hot Springs, South Dakota
Finney, Maud, 1907, clerk	Boston Store, Omaha
Fisk, Walter, 1909, clerk	Wray, Colorado
Fletcher, A. G., 1912	Neligh, Nebraska
Flood, Frank, 1904, proprietor	Darlington, Nebraska
Forrest, J. H., 1905, clerk	South Omaha, Nebraska
Fogerty, E. R., 1911, clerk	Lusk, Wyoming
Fox, Henry, 1912	Omaha, Nebraska
Fox, Morris, 1912	Omaha, Nebraska
Frahm, Harry M., 1908, clerk	Brownville, Nebraska
Fricke, C. B., 1903, Instructor, Creighton College of Pharmacy..	Omaha
Fricke, Albert, 1905, clerk	Omaha, Nebraska
Gilmore, S. L., 1906, clerk	Central City, Nebraska
Gilmore, George, 1912	Creston, Iowa

Gilmour, E. P., 1904, clerk	Lincoln, Nebraska
Goebel, H. C., 1911, clerk	Hartington, Nebraska
Gore, Jesse, 1905, proprietor	Bassett, Nebraska
Green, Ralph, 1905, proprietor	Elmwood, Nebraska
Gruesel, J. O., 1908, clerk	Lincoln, Nebraska
Grimes, E. L., 1904	Blue Hill, Nebraska
Guenthner, F. H., 1904, proprietor	Fremont, South Dakota
Gustine, G. E., 1905, proprietor	Whitewood, South Dakota
Haas, Helen, 1908, clerk	Omaha, Nebraska
Haden, Theodore, 1905, clerk	Crete, Nebraska
Hamel, M. O., 1905, proprietor	Ong, Nebraska
Hamilton, E. J., 1901, real estate	Wilsonville, Nebraska
Hansen, Bruno, 1911, clerk	Tilden, Nebraska
Hansen, Christian, 1909, clerk	Minden, Nebraska
Hansen, Hannah, 1907, clerk	Uehling, Nebraska
Hansen, J. C., 1907, clerk	Rock Springs, Nebraska
Hansen, H. C., 1902, proprietor	Lincoln, Nebraska
Hansen, L. P., 1907, proprietor	Ewing, Nebraska
Harper, E. J., 1904, proprietor, Member State Board of Pharmacy	Clearwater, Nebraska
Harriet, E. R., 1906, clerk	Pauline, Nebraska
Hassler, Earl, 1911, clerk	Plattsmouth, Nebraska
Heine, Clinton, 1906, student at State Uni.	Lincoln, Nebraska
Heinz, John, 1912	Petersburg, Nebraska
Heissel, A. W. S., 1908, clerk	La Mars, Iowa
Helm, John U., 1912	Lincoln, Nebraska
Henry, Grover, 1906, clerk	Pagosa Springs, Colorado
Heinrick, John, 1912.....	Plattsmouth, Nebraska
Henry, Vern, 1911, clerk	Salt Lake City, Utah
Harmansky, Frank, 1905, proprietor	South Omaha, Nebraska
Hines, A. S., 1908, clerk	Gooding, Idaho
Hinterlong, A. B., 1902, proprietor	31st and Farnam Sts., Omaha
Hitchcock, O. J., 1906, proprietor	Havelock, Nebraska
Hobart, Anna, 1911	Riverton, Nebraska
Holmes, John E., 1909, clerk	Alma, Nebraska
Holst, John, Jr., 1903, student Creighton Medical College.....	Omaha
Holst, Wm., 1907, proprietor	16th and Webster Sts., Omaha
Holly, Jerry, 1911, clerk	Rapid City, South Dakota
Hopping, E. E., 1907, clerk	Beaver City, Nebraska
Hughes, E. W., 1901	Deceased 1903
Hurst, Fred H., 1909, clerk	Dunbar, Nebraska
Inghram, Mabel F., 1908, clerk	South Omaha, Nebraska
Isenberg, C. M., 1908, banker	Emerson, Nebraska
Isenberg, Clyde, 1912	Emerson, Nebraska
Jacques, C. E., 1906	Address unknown
James, Margaret C., 1904, clerk	York, Nebraska
Janacek, Chas., 1903, proprietor.....	Schuyler, Nebraska
Jefferis, I. Carroll, 1912	Newcastle, Wyoming
Jensen, E. J., 1908, clerk	Emerson, Nebraska
Johnson, Clarence A., 1909, clerk	Mason City, Nebraska
Johnson, F. A., 1904, proprietor	Valparaiso, Nebraska
Kadavy, Godfrey, 1907, student	Creighton Medical College
Kavan, W. J., 1908, student	Creighton Medical College
Kavka, John, 1906, proprietor	Schuyler, Nebraska

Keefe, Thomas, 1909, proprietor	Clarks, Nebraska
Kelley, Chas. E., 1909, clerk	Davidson, Nebraska
Kelley, F. A., 1902, physician	Wichita, Kansas
Keedy, Earl, 1911, clerk	Omaha, Nebraska
Kellstrom, A. F., 1906, clerk	Omaha, Nebraska
Kent, Edward A., 1909, clerk, Beaton Drug Co.....	Omaha, Nebraska
Kingdon, Alfred, 1912.....	Kennard, Nebraska
Kintsel, Eric S., 1912	Oxford, Nebraska
Klein, Amos F., 1909, clerk	Hot Springs, South Dakota
Knaus, Frederick, 1906, clerk	Sheridan, Wyoming
Koza, E. H., 1903, proprietor	Clarkson, Nebraska
Kremer, A. R., 1902	Alexandria, Nebraska
Krenzien, Frank, 1902, clerk	Breda, Iowa
Kubic, F. C., 1902, proprietor	Wahoo, Nebraska
Ladegard, N. W., 1912	Litchfield, Nebraska
Langin, Harry C., 1912.....	Neola, Iowa
Larson, George, 1911, clerk	Friend, Nebraska
Larson, Leroy, 1911, clerk	Bertrand, Nebraska
Larson, Thomas, 1903, proprietor	Wilsonville, Nebraska
Leahy, Agnes, 1907	Benson, Nebraska
Lester, J. B., 1905	Address unknown
Levy, Isaac, 1907, clerk, Myers-Dillon.....	Omaha, Nebraska
Lindley, Erma, 1911, clerk	Riverton, Nebraska
Lilliedoll, L. B., 1905, clerk	Pickrell, Nebraska
Lindeman, A. A., 1907, proprietor	Crawford, Nebraska
Lippold, W. R., 1906, manager Brandeis Drug Dept..	Omaha, Nebraska
Locke, Bert, 1903, proprietor, member Nebraska State Board of Pharmacy	Central City, Nebraska
Logerwell, Reuben L., 1912	Naper, Nebraska
Lull, L. M., 1908, clerk	Shickley, Nebraska
Lupton, W. W., 1905, clerk.....	Onawa, Iowa
Luse, Jesse G., 1909, clerk	Ord, Nebraska
Luse, O. P., 1905, proprietor	Ord, Nebraska
Lynch, R. G., 1906, clerk	Holdrege, Nebraska
Mahannah, Willis, 1908, clerk	Butte, Nebraska
Marshall, F. W., 1907, salesman, Harle Haas Drug Co...	Co. Bluffs, Ia.
Maguire, Hugh, 1911, clerk	York, Nebraska
Martin, Aubrey, 1906, automobile dealer.....	St. Paul, Nebraska
Martin, C. W., 1906, real estate	Fowler, Colorado
Matthews, F. J., 1907, clerk	Pocatello, Idaho
Matthews, J. G., 1908, clerk	Walsenburg, Colorado
McAvin, James, 1908, student, Creighton Medical College...	Omaha
McCabe, Thomas H., 1909, clerk	Friend, Nebraska
McCarthy, J. P., 1908, clerk	Butte, Montana
McClung, W. E., 1904, farmer	Indianola, Nebraska
McCracken, O. V., 1908, banker	Oakland, California
McDonald, Fred, 1909, proprietor	Henry, Nebraska
McGee, L. E., 1908, chemist	Omaha, Nebraska
McNees, R. C., 1912	Chadron, Nebraska
Meehan, Fern, 1907, clerk	Leigh, Nebraska
Michael, E. A., 1905, machinist	Goldfield, Nevada
Michaelson, Walter, 1912	Plainview, Nebraska
McDonald, Merle, 1911, clerk	Murdock, Nebraska
McFarren, J. Leroy, 1911, clerk	Omaha, Nebraska

McNally, R. B., 1911, clerk	Emmettsburg, Iowa
Miller, C. A., 1903, clerk	Aurora, Nebraska
Miller, F. P., 1908, clerk, Myer-Dillon	Omaha, Nebraska
Miller, Lewis A., 1909, clerk	Council Bluffs, Iowa
Minnick, Nettie, 1909, clerk	Holbrook, Nebraska
Mitchell, E. J., 1908, student, Creighton Medical College	Omaha
Moody, W. F., 1909, clerk	Grand Island, Nebraska
Moore, Charles W., 1909, clerk	Friend, Nebraska
Moore, James F., 1909, clerk	Callaway, Nebraska
Motl, John, 1905, proprietor	Dodge, Nebraska
Motsick, J. L., 1904, clerk	Ravenna, Nebraska
Mowers, C. L., 1905, proprietor	Colon, Nebraska
Molseed, Clarence, 1911, student Creighton Medical College ..	Omaha
Murphy, P. J., 1905	Deceased 1907
Murray, Frank, 1907, clerk	Ogden, Utah
Meyers, G. W., 1907, proprietor	Ragan, Nebraska
Neeley, Raymond, 1907, proprietor	Gering, Nebraska
Nippel, Chas., 1911, clerk	Rapid City, South Dakota
Norris, J. S., 1912	Omaha, Nebraska
Nylen, Thomas L., 1909, clerk	Douglas, Wyoming
Obert, August J., 1908, clerk	Hartington, Nebraska
Odou, W. D., 1908, clerk	Daviston, South Dakota
Olson, Oscar O., 1909, clerk	Omaha, Nebraska
O'Neill, T. B., 1908, clerk	Glens Ferry, Idaho
Pacal, J. S., 1909, proprietor	Weston, Nebraska
Panter, S. G., Jr., 1904, physician	Dorchester, Nebraska
Patrick, K. L., 1903, proprietor, 24th and Hamilton Sts.	Omaha
Perrenoud, Carl, 1911, clerk	Silver Creek, Nebraska
Peterson, A. W., 1903, clerk	Sutherland, Nebraska
Peterson, Carrye, 1907, proprietress	Wolbach, Nebraska
Peterson, Henry, 1911, clerk	Dannebrog, Nebraska
Phelps, Guy, 1911, proprietor	Exeter, Nebraska
Plouzek, J. W., 1908, clerk	Crete, Nebraska
Podolak, Kenneth, 1906, clerk	Omaha, Nebraska
Poellott, F. E., 1907, proprietor	Coleridge, Nebraska
Porter, John C., 1912	Oxford, Nebraska
Pohl, W. A., 1908, proprietor	Denver, Colorado
Pope, L. S., 1905, proprietor, 13th and Farnam Sts.	Omaha, Nebraska
Pope, E. F., 1907, proprietor, 13th and Farnam Sts.	Omaha, Nebraska
Pope, Lois, 1903, (Mrs. A. H. Porter)	Chicago, Illinois
Potter, Bird S., 1909, clerk	Gothenburg, Nebraska
Potter, C. A., 1907, proprietor	Litchfield, Nebraska
Price, L. M., 1902, clerk	Omaha, Nebraska
Rabinowitz, Abe., 1902, proprietor, 16th and Howard Sts.	Omaha
Radinsky, Thos., 1905, proprietor	Johnson, Nebraska
Rasmussen, V. C., 1906, proprietor	Farwell, Nebraska
Ratcliff, Henry, 1905	Deceased 1910
Ray, Bert, 1903, proprietor	Gresham, Nebraska
Redman, Chas., 1905, implement business	Kenesaw, Nebraska
Ralya, Claude, 1911, clerk	Omaha
Reardon, Harry J., 1911, clerk	Omaha
Reed, Carl W., 1909, clegk	Woodbine, Iowa
Reid, Clyde J., 1909, clerk	Herman, Nebraska
Reiland, R. F., 1903, clerk	Omaha, Nebraska

Reuting, Claude, 1912.....	Grand Island, Nebraska
Reynolds, E. M., 1908, clerk.....	Edison, Nebraska
Riley, F. L., 1908, clerk.....	Danbury, Nebraska
Robinson, Evelyn, 1908.....	Silver City, Nebraska
Roche, Riley, 1911, manager.....	Kimball, Nebraska
Roskhold, Ethel (Mrs. Boyle).....	O'Neill, Nebraska
Roeder, Frances J., 1907, clerk.....	Omaha, Nebraska
Rogan, Ollie, 1906, clerk.....	Central City, Nebraska
Rolland, A. N., 1905, proprietor.....	Crete, Nebraska
Roupp, C., 1911, proprietor.....	Omaha, Nebraska
Roush, H. A., 1911, clerk.....	Alexandria, Nebraska
Russell, M. M., 1908, clerk.....	Chillicothe, Missouri
Ruth, J. M., 1904, clerk.....	Newmans Grove, Nebraska
Ruzicka, Oscar, 1905, proprieor.....	Omaha, Nebraska
Ryan, A. H., 1906.....	Address Unknown
Ryan, John J., 1912.....	Overton, Nebraska
Saffran, F. A., 1904, clerk.....	Columbus, Nebraska
Sage, J. R., 1906, clerk.....	Ainsworth, Nebraska
Sage, Verne, 1907, clerk.....	Boise, Idaho
Samuelson, Dick, 1907, clerk.....	Omaha, Nebraska
Scanlan, P. J., 1902, proprietor.....	Omaha, Nebraska
Schmeling, Paul, 1912.....	Omaha, Nebraska
Schultz, P. W., proprietor.....	Wall, South Dakota
Schiller, Alfred, 1907, manager.....	Omaha, Nebraska
Scott, M. J., 1904, physician.....	Butte, Montana
Searson, E. A., 1905, proprietor.....	Benson, Nebraska
Seasongood, E. R., 1906, physician.....	Naper, Nebraska
Seasongood, R. R., 1904, physician.....	Ohiowa, Nebraska
Selling, Otto, 1912.....	Benson, Nebraska
Sexson, W. B., 1906, proprietor.....	Oroville, Washington
Shalda, J. J., 1911, clerk.....	Wayne, Nebraska
Sievers, Antony, 1911, clerk.....	Cozad, Nebraska
Sheffrey, C. E., 1901, clerk.....	Omaha, Nebraska
Sherman, Rollin C., 1912.....	Omaha, Nebraska
Siegel, Philip, 1906, clerk.....	Colorado Springs, Colorado
Simms, David, 1905, clerk.....	Alma, Nebraska
Simms, J. S., 1902, clerk.....	Alma, Nebraska
Sittler, A. L., 1908, clerk.....	Davenport, Nebraska
Smith, H. C., 1908, proprietor.....	Ainsworth, Nebraska
Smith, Vera, 1908, clerk.....	North Loup, Nebraska
Smith, Grace B., 1906, clerk.....	North Loup, Nebraska
Smith, J. E., 1904, clerk.....	Los Angeles, California
Smith, Max, 1903, stock salesman.....	South Omaha, Nebraska
Smrkovsky, C., 1904, clerk.....	Omaha, Nebraska
Snell, Walter, 1907.....	Benson, Nebraska
Snyder, J. L., 1908, clerk.....	Pender, Nebraska
Sobeslavsky, L. F., 1905, clerk.....	South Omaha, Nebraska
Solt, W. F., 1905, proprietor.....	Leigh, Nebraska
Spellman, J. E., 1909, clerk.....	Omaha, Nebraska
Sprague, Chas., 1904, proprietor.....	Benson, Nebraska
Stackhouse, Harry A., 1909, clerk.....	Merna, Nebraska
Stava, E. J., 1903, salesman.....	Omaha, Nebraska
Stava, F. A., 1903, proprietor.....	Valparaiso, Nebraska
St John, Verne, 1906, clerk.....	Sheridan, Wyoming
Stong, Willard, 1909, clerk.....	Helena, Nebraska

Stillman, B. E., 1904, proprietor.....	Lead, South Dakota
Stitzer, C. E., 1907, clerk.....	Lincoln, Nebraska
Strelow, G. F., 1907, proprietor.....	Long Pine, Nebraska
Sullivan, J. J., 1911, clerk.....	Sheridan, Wyoming
Sullivan, F. E., 1908, clerk.....	Doniphan, Nebraska
Summitt, Thaddeus, E., 1909, clerk.....	Omaha, Nebraska
Svoboda, Joseph, 1906, clerk.....	South Omaha, Nebraska
Swanson, Oscar L., 1909, proprietor.....	Loup City, Nebraska
Taborsky, Augustin, 1902, proprietor.....	Eustis, Nebraska
Tennant, Merle E., 1909, clerk.....	Cairo, Nebraska
Terrell, Price, 1912.....	Omaha, Nebraska
Tex, Henry J., 1909, clerk.....	Columbus, Nebraska
Thelen, Franz, 1904, clerk.....	Shelby, Nebraska
Thompson, Geo. B., 191, clerk.....	Belvidere, Nebraska
Thompson, Richard, 1911, clerk.....	Myers-Dillon Co., Omaha
Thomsen, Frank D., 1912.....	Rochelle, Nebraska
Tomsik, Chas., 1911, proprietor.....	Sheridan, Wyoming
Thornton, R. M., 1907, proprietor.....	Cozad, Nebraska
Tourville, Alexander, 1912.....	Centerville, Minnesota
Trierweiler, J. E., 1907, student.....	Creighton Medical College, Omaha
Uhlig, Otto, 1904, clerk.....	Spearfish, South Dakota
Vachal, P. J., 1907, clerk.....	10th and Hickory Streets, Omaha
Van Tilborg, L. A., 1902, proprietor.....	Cripple Creek, Colorado
Vermillion, Margaret R., 1908, clerk.....	Salt Lake City, Utah
Vermillion, Henrietta R., 1908, clerk.....	Salt Lake City, Utah
Versaw, Chas., 1911, clerk.....	Bloomington, Nebraska
Vickrey, H. D., 1903, proprietor.....	Minco, Indian Territory
Vitamvas, John, 1912.....	Omaha, Nebraska
Voss, W. T., 1907, proprietor.....	Germantown, Nebraska
Wakeman, A. W., 1904, proprietor.....	Elk Creek, Nebraska
Walker, A. G., 1902, proprietor.....	Mason City, Nebraska
Walker, A. W., 1904, physician.....	San Francisco, California
Watson, Burton, 1905.....	Address Unknown
Watson, Elizabeth F., 1906, clerk.....	Surprise, Nebraska
Ward, Homer E., 1912.....	Kennard, Nebraska
Ward, Oliver L., 1911, clerk.....	St. Paul, Nebraska
Wegner, E. S., 1908, clerk.....	Omaha, Nebraska
Weinandt, E. L., 1908, proprietor.....	Emerson, Nebraska
Welsh, M. D., 1904, proprietor.....	Cortland, Nebraska
Wertman, H. H., 1904, clerk.....	Milford, Nebraska
White, Edith M., 1909, clerk.....	Omaha, Nebraska
White, Mary E., 1901, clerk.....	Omaha, Nebraska
Whitten, E. E., 1905.....	Albion, Nebraska
Wiederanders, G. G., 1903.....	Gothenburg, Nebraska
Wiederkoehr, C. F., 1902, deceased 1905.....	
Willard, W. W., 1903, clerk.....	Lewiston, Montana
Wilson, D. E., 1907, clerk.....	Boulder, Colorado
Wilson, Mrs. Rinnie, 1903, proprietress.....	Atkinson, Nebraska
Windolph, Oscar, 1912.....	Grand Island, Nebraska
Worthing, B. G., 1905, clerk.....	Amherst, Nebraska
Wolley, Frank B., jr., 1909, clerk.....	Logan, Utah
Wright, Frank X., 1903, clerk.....	Porterville, California
Zabel, Ella, 1907, (Mrs. G. F. Strelow).....	Long Pine, Nebraska
Zajicek, Adolph F., 1909, clerk.....	Wilber, Nebraska

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